

Using Natural Libraries

A library in Natural terms is the container for Natural objects. A Natural application can access objects in multiple libraries depending on how the environment is set up.

The following topics are covered below:

- Logon to a Library
- Library Types
- Library Naming Conventions
- Library Commands
- Library Operations
- Library Limit
- Example Library for New Features

See also:

- *STEPLIB (for information on the STEPLIB concept)
 - Defining Your Own Logon Library
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Logon to a Library

In order to work with objects in a Natural library or to start an application inside a specific library, a Logon to this library must first be performed (see also the STEPLIB concept).

Automatic Logon to a Library

As of Natural 5.1.1, an automatic logon is performed any time a different library is selected or an object inside a different library is selected.

Manual Logon to a Library

Apart from the implicitly performed mechanism, it is still possible to perform a manual logon with the LOGON command in the Command Line.

Generally, you can change libraries anywhere in Natural by entering the following system command in the command line:

```
LOGON library-ID
```

where *library-ID* is the ID (name) of the library you want to access.

Library Types

Three types of libraries are available.

System Library	<p>The system libraries are reserved for Software AG purposes only and are subject to change without notice. The currently available system libraries are also known as the FNAT systemfile which is version-dependent.</p> <p>Important: Do not put any application-specific data in this library.</p> <p>Example of a system library: The library "SYSERR" represents a system application to maintain error messages. A system library is always named with the "SYS" prefix in the library name.</p>
User Library	<p>Used to develop the application. The currently available user libraries are also known as the FUSER systemfile.</p> <p>It contains all the objects of an application which are specific to this application. A user library is always named with the prefix not equal to "SYS" in the library name.</p>
Inactive Library	<p>A library which cannot be accessed by an application.</p> <p>For using an inactive library, the status must be changed from inactive to active, that means the correspondig inactive systemfile must become an active one (either FUSER or FNAT). For more information, refer to FUSER, FNAT and System Files in the Natural Operations documentation.</p> <p>Inactive libraries can be used for the Object Operations and Library Operations only.</p>

Library Naming Conventions

The name of a Natural library can be 1 to 8 characters long. It must start with an upper-case alphabetical character and can consist of the following characters:

Character	Explanation
A- Z	uppe case alphabetical characters
0 - 9	numeric characters
-	hyphen
_	underline

Library Commands

The CATALL command is used to catalog all objects in the current library. For a full description, see the CATALL command.

Library Operations

- Creating a New Library
- Copying or Moving a Library
- Deleting a Library
- Renaming a Library

The library operations like copy, move, rename or delete can be applied inside the library workspace and inside any open systemfile listview.

Creating a New Library

A new library can only be created in a systemfile (FNAT or FUSER) located inside the Local Environment and only one library can be created at a time.

In addition, the following restrictions exist:

- When a new library is to be created in the "user libraries", the library name **must not** start with "SYS".
- When a new library is to be created in the "system libraries", the library name **must** start with "SYS".
- Furthermore, a new library named "SYSTEM" must not be created.



To create a new library

1. Select the corresponding systemfile node (e.g. "user libraries" in the library workspace logical view).
2. From the node's context menu, choose **New**.
With this command, an in-place-editing process is started.
Natural creates a default name sorted into the existing library list which can be changed to any name conforming to the library naming conventions.
3. To finish the in-place editing, press **ESC** or **ENTER**.
Or click with the mouse button on a different location.

The new library is inserted sorted into all library views.

Copying or Moving a Library

To copy or move a library

1. Select the corresponding library node in the library workspace.
Or open the Local Environment or Remote Environment list view.
The target node of the copy or the move of a library can be any systemfile node (FNAT, FUSER or an inactive systemfile) or even any other library node. In the latter case all objects of the source library are copied.
2. Copy a library to the "user libraries" (FUSER) or the "system libraries" (FNAT) systemfile.

When a library is copied to the "user libraries" system file of the **active environment**, the new library must conform to the naming conventions for user libraries (FUSER), that means the library must not start with "SYS". Therefore, a dialog is displayed where the default library name provided ("USRLIB") can be overwritten.

The same handling applies to the system file FNAT where the library name must start with "SYS". In this case, the dialog mentioned offers the default name "SYSLIB".

In all other situations, for example, when copying a library from FNAT to an inactive system file, the name of the source library is taken as the target library name.

Deleting a Library

If you are working in a multiple-user environment, you should only delete a Natural library if you have exclusive access to the library involved.

To delete a library

1. From the **Library** menu, choose **Delete**.
The "Delete a Library" dialog box is displayed.
2. From the "Library" drop-down list box, select the library to be deleted.
Deselect the **Confirm on Delete** toggle button to suppress deletion confirmation messages.
If a confirmation message is desired, leave the toggle button selected.
Choose **OK** or press **ENTER**.
After confirmation, the library is deleted.
Or select the library and press the **DEL** key.
Or select the **Delete** item from the context menu.
Or select the **Delete** item from the menu bar.

Renaming a Library

Renaming of a library is done with in-place-editing. Only one library can be renamed at a time.

If several libraries in a list view are selected and the **Rename** item is applied, the operation is performed for the library node currently having the focus.

The name of a user library (FUSER) must not start with "SYS", whereas a system library has to start with "SYS". The library named "SYSTEM" cannot be renamed.

To start in place editing

1. Select the node.
2. Open the context menu and apply the **Rename** item.
Or press **F2**.
Or click on the selected node with the left mouse button.

3. Enter the new library name and press **ENTER** to confirm (or **ESC** to cancel).
The in-place-editing process is finished.

Alternative method of doing the rename:

1. Select the item.
2. Choose **Rename** from the menu bar's **Object** submenu.
3. Enter the new name.
4. Press **ENTER** to confirm (or **ESC** to cancel).
Or click with any mouse button on a different position.
The in-place-editing process is finished.

Library Limit

The maximum number of Natural objects that can be contained in a Natural library is 30000.

Example Library for New Features

The library SYSEXV contains several example programs which illustrate some of the new features of Natural version 5.1. and the former version 4.1.



To access the example programs

1. Log on to library SYSEXV and open the folder "Dialog".
2. Execute the dialog VERSION.

A dialog is displayed from which you can select the respective version and its example programs.